# THE VETERINARY RECORD

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Edited by WILLIAM HUNTING, F.R.C.V.S.

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## THE NEW VETERINARY COLLEGE.

We gather from a note which we reproduce from *The North British Agriculturist* that Principal Williams has decided to put in practice his oft expressed desire that Veterinary Schools should be attached to or connected with a University. Of the details of the change we have no knowledge, but our contempory says:—"For a long time back "Principal Williams has been moving in the way of "getting the Veterinary Colleges affiliated with the "Universities and having a University degree for "students who, etc. . . . . The authorities of the "Liverpool University have recognised the wisdom "of the Principal's proposal and they have cordially "agreed to adopt the Principal's scheme. The "Principal has therefore decided to move the New "Veterinary College from Edinburgh to Liverpool—"teaching staff and students going with him."

We admire the pluck shown by Principal Williams in making this move, and we sympathise with him in the pain it must cause to separate from friends and associations of such long standing. From a business point of view the change must be accompanied by some anxiety. The proprietor of a school has always an extensive practice attached to the institution and only a portion of this can be retained. The Principal of a School has, however, a practice largely consulting, and for this distance is of less importance than the reputation of the man. So far as the number of students are concerned we should fancy Liverpool would be a better centre than the Scotch metropolis.

There is just one point we should like to know more about. The Liverpool University are offering a Degree in Veterinary Hygiene. We have refrained from any comment on this matter because we did not know who was to teach veterinary hygiene or who was to examine on it. Respectfully and honestly, we have no confidence in the veterinary teaching by doctors, and still less in the examination of veterinary surgeons on hygiene by simple medical men.

The gentleman who teaches physiology and hygiene to veterinary surgeons and does not know what a proper food ration for a horse is falls short of our idea of fitness.

With a Veterinary School and a teacher of Prof. Williams' eminence attached we shall hope more for the Liverpool veterinary degree.

## ABSTRACTS FROM FOREIGN JOURNALS.

FRACTURE OF THE FIRST PHALANGE FOLLOWING AN INJECTION OF COCAINE.—By M. COQUOT, Professeur de Clinique, Alfort.

A light Hungarian horse, bay, aged 14 years, was presented at the consultation at the School on February 10, for lameness of the off fore, of about three weeks standing. The lameness, which was marked at starting, diminished, and disappeared after ten to fifteen minutes exercise. Methodical examination of the member gave no sufficient explanation of the lameness. The foot was slightly narrowed at the heel, but without heat or tenderness; the pastern, the tendons, the shoulder, showed no apparent lesion.

Following our usual practice, I injected cocaine over the plantar nerves above the fetlock. Ten minutes after the injection he was exercised at the trot for about 100 yards, lameness had entirely disappeared. Before a group of students, with the object of further demonstration, I had him trotted again. To our great surprise after some seconds, the fetlock gave down and touched the ground at each step.

On careful examination I diagnosed a diagonal fracture of the first phalanx, involving all the upper portion of the bone. Crepitation was distinct. One could recognise that the anterior extremity, slightly displaced vertically, had gone up in front of the lower extremity of the principal metacarpal; and consequently the lower extremity of the hinder end, thin and sharp, came through under the skin of the hollow of the pastern.

The animal was killed, but unfortunately I did not get the specimen at once, as I asked, but only after four or five days. (Specimen exhibited). It will be seen that there is a fragment of bone between the two principal ones, entirely free and formed of spongy tissue; it is two centimetres in length, three in width, and one in thickness. This splinter shows at its superior extremity a small portion of articular surface detached with it.

The explanation of the fracture appears simple. The insensibility of the part anæsthetised, which was previously painful, caused the animal to miscalculate the force of his steps.

The fact that a fracture may be produced after an injection seems to call for some precautions during the period of anæsthesia:—To exercise the animal only at a moderate pace, on a loose soil, and only long enough for clinical observation. (2) To recommend the owner on no account to put the animal in harness until the effect of the anæsthetic has completely disappeared. No one can deny the

utility of these precautions, since an unsuspected lesion, whether of osteoporosis, ostitis or incipient fracture may be followed by fracture when the pain in the member is suppressed.

M. Trasbot. At a recent *séance* M. Desoubry showed us a phalanx of a fore limb, fractured during exercise. The lameness had been located by the aid of cocaine, at the lower extremity of the phalanges. At the autopsy no lesion was found which gave any explanation of the lameness, nor in the bone any sign of previous alteration which might have induced the fracture. M. Desoubry had not been able to examine the soft parts; perhaps the cause of the lameness might have been found there. M. Coquot has just given us an analogous case. There is no evidence of any previous alteration in the bone. I do not infer, however, that the lameness did not result from a lesion at the lower part of the member. First because in the immense majority of lamenesses in front it is there, and because one, and indeed several negative facts prove nothing.

But I can affirm that such a lesion of the bone is not necessary. Several years ago I saw an accident which proved irrefragably that a horse, absolutely sound, may fracture a pastern when galloping if not *en garde* against a possible danger. During a hunt in the forest of Chantilly an excellent mare was galloped in a long alley of sand which crosses the paved road from Paris to Senlis; putting her foot on the paving she fractured a pastern. After travelling on a road as soft as a mattress the instinct of self preservation was at rest, just as horses when the foot is insensible from cocaine, she was not *en garde* against the possible effect of concussion on hard ground. This mare was in full training, and seven to eight years old. Hence one has the right to affirm that a previous alteration of the first phalange is not a necessity in the production of fracture resulting from a shock not foreseen on the part of the animal.—*Bull. de la Société Centrale de Méd Vét.*, 30 Mars.

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Fracture of First Phalange, Consecutive Neurotomies.—By M. Alix.

A mare, 14 years, fractured the off fore pastern: was placed in slings. The injured member, with a padded bracelet placed above the knee, was suspended by means of a splint to a bar of the apparatus in such a way that the fore arm was parallel to the ground. In this way not only was the injured part more accessible to the operator, but from the fact that the limb hung free from the knee the reduction of the fracture was effected almost naturally and kept in place simply by the weight of the foot. The foot being fixed in a good position, a plaster bandage was applied. The suspension of the limb was continued 48 hours. Six weeks after she was put in a temporary box, and fifteen days later the bandage was removed. The callus was not large, but she walked badly, going on her toes. Three months later median neurectomy was performed; found insufficient it was supplemented by external plantar neurectomy, which was followed by disappearance of the lameness.—*Rev. Gén. de Méd. Vét.* Ex. *Recueil d'hygiene et de Méd. Vét. Militaire.*

Crack and Subsequent Fracture of the First Phalanges of the Hind Legs.—By M. Mansis.

A horse, 16 years old, became lame of the off hind after jumping a bank. Walking was very painful. Hæmoglobinuria was suspected.

June 1. The off hind was used only on the toe; decubitus became permanent.

June 3. He was placed in slings for five days, at the end of which he rested on the right limb, the left hind being used on the toe only. The fetlocks were dropped and the pasterns twisted outwards. The coronet was œdematous.

He was taken out of the apparatus and managed to get to his box, about 40 yards away. Decubitus became permanent; he rose with difficulty, only with the help of traction on the bridle reins.

On June 19, examining for the third time the lower part of the limbs, a double fracture of the hind pasterns was found. The animal was at once destroyed.

The causes suggested are: the jump, the age of the animal, and what is now called "ostitis of fatigue."—*Ibid.*

On Fissure of the First Phalange of the Horse.—By Dr. A. Zimmermann, Budapest.

Latterly reports on fissure and even crushing of the first phalange are not at all uncommon. Among the predisposing causes figuring in the first line are faults in placing the feet, giving indirect and unequal pressure. In consequence of the anatomical situation, the first phalange will bear scarcely any lateral deviation, and when this does occur the metacarpal gets a twisted lateral movement, and comes to act like a wedge on the phalange, which it splits.

The fissure is usually found in the anterior half of the bone, and coincides regularly with a deviation of the phalange. The direction of the fissure is almost without exception longitudinal, and for the most part saggital. It occurs more often in the fore than in the hind limbs.

The dominant symptom is the sudden appearance of extreme lameness with volar flexion of the foot. Passive dorsal flexion of the phalanges is very painful; light pressure on the first phalange produces sharp pain. After some days there is an œdematous tumefaction, not very marked, in the neighbourhood of the fissure.

Various authors state that the prognosis is usually favourable, although an exostosis is commonly left at the seat of fracture. Treatment extends from 3 to 8 weeks.

Contrary to the opinion of Peters, one cannot admit that sensibility to pressure on the anterior surface of the first phalange is sufficient to establish a diagnosis of fissure of the bone, for the same symptom occurs in acute inflammation of the articulation of the fetlock.

In the last ten years, we have had, at the Budapest School, 14 cases of fissure of the first phalange. This figure does not, in all probability, cover the whole of these accidents, for it only includes those cases in which the differential diagnosis has been surely established.

The further progress of these cases has not been so favourable as some authors claim ; we see sometimes an aggravation of the fissure, resulting in complete fracture.—*Rev. Gén. de Méd. Vét.* Ex. *Allatorvosi Lapok.*

W. H. B.

## THE THEORY OF HEREDITY.

By D. Silvestro Rabagliati, B.Sc.

Class D Student, Royal (Dick) Veterinary College.

A paper read before the Edinburgh Veterinary Medical Association, Feb. 26th, 1904.

*(Continued from p. 627).*

We keep animals for our own use in surroundings very different often from those for which nature intended them. We use them as we think fit, taking what work we want out of them, we may over-feed them or under-feed them or feed them on unsuitable foods. Some of these animals we work hard continuously, others only spasmodically, while others such as milk cows and fattening cattle are made into mere machines. And yet, after all this we wonder why they fall ill, and some of us I fear would still lay all the blame on their progenitors. We seem to forget a very true axiom "Like causes acting on like organisms throughout successive generations tend to produce like effects," but this is not heredity. If we think of the so-called hereditary diseases we see that they are all dependent on some peculiarity of structure. Animals with these diseases no doubt tend to give rise to offspring with tendencies to similar defects, but the actual diseases are not likely to show themselves unless some external causes of these diseases are also in operation. The following diseases of the horse were recognised as hereditary by the Royal Horse Breeding Commission : Ringbone, spavin, sidebones, navicular disease, cataract, defective feet, defective wind. All these diseases I think conclusively bear out what I have already said about peculiarity in conformation, which unquestionably is transmitted when it arises primarily as a spontaneous variation. It is well known that horses with upright "stilty" pasterns are very liable to develope ringbone due to excessive concussion on hard roads, and so also those with excessively long oblique pasterns, due in this case to increased strain on the tendons. These conditions without doubt are frequently of a transmissible nature, and thus we have horses with an inherited liability to ringbone, but not with inherited ringbone.

So also is it with spavin. Horses with sickle-shaped hocks and those with hocks with ill developed bones of the lower part, and with small metatarsals, the so-called "tied in" hocks of horsemen, are all more prone to develope spavin.

Spavin is undoubtedly a disease of middle or late middle life, not occurring till many factors have been long at work so as to cause it, and this in itself is against it being inherited.

I fully admit that to the breeder this confession must look much as if we frankly admitted that the diseases were frequently inherited, but to the scientist the distinction must be a vital one.

However, in this case the breeder need not hesitate to breed from a horse with well shaped hocks, even if he has from some external cause developed a spavin, though if the hocks are naturally ill shapen such an animal should not be used for stud purposes. This also applies to other natural malformations, as we want horses with strong susceptibilities to disease almost as little as those with actual diseases.

Much has been said and written as to the hereditary nature of tuberculosis, but I think most pathologists are now agreed that this supposition is false. Doubtless animals far gone in the disease are not in a fit state to bear offspring, and for this reason the progeny of such animals are from the very first in a very weakly state and liable to take tubercle, or for that matter any contagious or infectious disease with which they may happen to come in contact. If, however, they can once be got to be thriving and thoroughly healthy I do not believe they will be any more susceptible to that disease than animals born of healthy parents, and less so even than naturally weak and unthrifty animals, from non-tuberculous parents though they be. It is thought that some animals with naturally thin skins and their mucous membranes in a weak and easily lacerated state, and with constitutions altogether weak are especially prone to tubercle. This constitutional weakness and the special peculiarities are no doubt frequently passed down from generation to generation, but it is in very rare cases that the disease itself is passed down. Profs. Bang and Nocard have experimented with calves from tuberculous parents, and by some extra care in early rearing have found them to be very healthy with the exception of a few cases believed to be congenital.

This brings me to another point, and that is that one must not fall into the error of not differentiating an inherited from a congenital character.

A congenital character is one of which an animal is possessed, as I would interpret it, at the moment of its birth. This may or may not be inherited, and we must fully grasp the fact that all congenital charcters are not hereditary in origin. The young animals before their birth have been undergoing a longer or a shorter period of intra uterine life and many influences may have affected them during this period. The fœtus may even have been infected from its mother from some interchange of blood, but this certainly is a rare, if even a possible occurrence. Cases are recorded of acute fevers and even of small-pox being infected in utero, but this is not inheritance. We might just as well say that a child of twelve who had contracted measles because its mother had an attack, had inherited the measles. Another instance to make my meaning clearer. Let us suppose we have a cow about to calve, and the day before she should calve a horse kicks her and breaks her leg at the radius and ulna. The next day in calving some difficulty is experienced in getting away the calf and some clumsy non-professional accoucheur breaks the radius and ulna of the calf corresponding to those the mother had broken, while the calf is still in the uterus. After this the calf is delivered with its leg broken. Now this calf has a broken leg when born so that the defect is congenital, and its mother also has a broken leg, but whether this is to be considered an inherited character I leave for you to decide. This is really only a slight exaggeration of what is done every day, if you choose to say that the condition is inherited.

A hereditary character, according to the usual acceptation of the term, may or may not be congenital ; or in other words a hereditary character may be latent at the time of birth and only show itself later. That this is sometimes true we cannot deny, but I cannot see why if a disease does not occur till later in life it should be called inherited, and not put down to causes which have acted on the individual during its own life.

The higher faculties of man, which are frequently inherited, must essentially only appear later in life, as we would hardly expect the child of a great singer to

make its first wants known in the voice of a Patti, nor yet the child of an artist to produce a "Ræburn" for the Academy on the day of its birth. These faculties are, however, not physical entities as are morbid lesions, but must be cultivated.

Just one word about that much discussed disease cancer. "Is cancer hereditary?" is a question much more frequently asked than satisfactorily answered. I do not emphatically deny cancer is never inherited, but if ever it is extremely rare. Cancer does unquestionably seem to run in some families more than in others, and here again we can only say that there is a hereditary predisposition to it transmitted.

Cancer in man is a disease almost wholly confined to middle or late middle life. If a disease were inherited I hold it would appear early in life, at least there would be something to show, at or soon after birth, but there is not.

It seems very improbable, well nigh impossible, that the disease would lie latent for 50 years or more, as it frequently would have to do were it inherited. Far more probable I think that those self same causes which for 50 years in the parent have acted more or less and produced the disease have acted on a similar organisation in the case of the children and have produced similar effects. I am not one of those who would go so far as to dogmatise and say disease is never inherited as some theorists do.

We must remember we are dealing with complex organic individuals, and no hard and fast rule can be laid down in nature. We have undoubtedly occasional instances of congenital disease which, if not inherited, is very difficult to explain. Some might say it is due to spontaneous variation, but this would appear to be too far fetched to my mind. I know of a case of well marked alcoholic or gin drinker's liver, found on post-mortem of a child of eight. This child had never tasted alcohol in its short life, but its father was a confirmed drunkard and afterwards succumbed to his disease (alcoholism) and was found to have his liver in a similar condition. I am not going even to try to explain this fact, as any attempt would be a mere surmise. It is to me one of nature's inexplicable mysteries. The occurrence of monstrosities is well known to run in some families or strains of animals. One animal will frequently give birth to abnormal offspring more than once if continually bred from, and her offspring, even if possibly sound themselves, will often give birth to monstrosities. These may be considered I think as spontaneous variations, which we saw are of a hereditary nature.

The subject of immunity to disease is a vast one, and I do not intend to discuss it here, but most of us know that this immunity is of two classes, natural or innate immunity and acquired immunity. The former, the animal has as an innate character at birth in virtue of which it is immune to a greater or lesser extent to certain diseases, as for example, the horse being totally immune to swine fever and the sheep possessing a considerable immunity to tuberculosis. This natural immunity is inherited without doubt, as it is an inherent essential quality of the species and is just as specific to the animal as any of the morphological characters by which a species is recognised. To make this proof more evident let us look at natural immunity in another light. Natural immunity is nothing more than a natural inverse susceptibility, and as I think no one can deny the hereditary nature of susceptibilities, I do not see how that of immunity can be questioned.

As this is not a treatise on the heredity of disease only, I must pass on from this, though I would fain have said more about it. Heredity of natural idiosyncrasies is, I think, fully admitted. How often do we see a man walk with the same gait as his father, or speak with an amazing similarity of voice! Against this it may be argued that it is a mere imitation, which I admit may be true in some instances. Have we not often seen it in children who have been separated from their parents since babyhood, and can this be imitation?

The trait of genius in man's character is transmissible. The old adage that "Genius is akin to madness" is well exemplified here. The form that that genius takes in the children is not necessarily the same as it assumed in the parent. It may in the children take the form of real genius in some other direction, as the child of a great mathematician being very musical, or it may take the form of vice, such as drunkenness and its associates, or it may assume the phase of real insanity. Let not my friends, however, think that all vice is a mark of genius. The great majority unfortunately is not. What I wish to point out is simply that genius shows an instability of character which is hereditary.

Temper is a quality frequently transmitted. We all know it is bad policy to breed from a horse with an inherent bad temper, because practice, worth any amount of theory, has shown us that the foals are frequently possessed of it too. Having given a slight sketch of the chief characters involved in heredity, I think you will agree with me that up to the present embryological research has not by any means made the laws of heredity clear. Weisman's germ plasm, Galton's stirp, and Beard's germinal cells do not explain in a satisfactory manner all the facts which we see before us every day. Whatever be the views of these investigators, one feels disinclined to believe that the parent plays such a small part in the destiny of the offspring as these theories would have us believe, although doubtless the part played by the parent has by most people been grossly exaggerated.

The theory of telegony is one very closely related to that of heredity, and a paper like this would scarcely be complete without saying a little about it. This theory assumes that a female animal is "tainted" by the first male to which she bears offspring, and some go further and say by subsequent males also. In other words it assumes that all subsequent offspring the said female may bear are liable to show characters acquired from the first male (or subsequent males) which impregnated her.

This theory is at the present day held by the great majority of breeders, farmers and people who have to do with animals.

Until quite recently it was also firmly believed in by scientific men, but among this class I believe it has either exploded or is rapidly doing so. The universality of the theory is such that one would be inclined to give credence to it, but on enquiry and investigation I think one is quite justified in saying it is absolutely false.

Personally, I have discussed the question with a considerable number of farmers, many of them well-educated, thoughful, and observant men, and my experience has been that they all fully believe in the "infection" theory as it is termed. When, however, I have asked for actual examples, I do not remember having one true case given me, though all speak of indefinite instances that they have heard of.

We are told that half-bred ewes (Border Leicester, and Cheviot crosses) when crossed with an Oxford down, Hampshire, Shropshire, or Suffolk ram, give lambs with dark faces, as we all know, but they contend that if these ewes are again put to pure bred Border Leicester rams they throw lambs frequently with dark faces and legs instead of being all white as one would expect. As I said, notwithstanding these statements, I have thought it peculiar never to have heard of concrete examples. No doubt some instances as described have occurred, but we must recollect we are dealing with cross-bred sheep, and the inter-crossing of cross-bred animals always tends to reversion in some form or other. Moreover, all breeds of sheep in this country have been

altered by judicious crossing at some time or other, thus the so-called instances of telegony are most probably examples of reversion. I was recently speaking to a sheep farmer from the Scottish Highlands who told me he fully believed in this theory, and that it was in vogue in his district.

It so happened that I knew he had crossed some black-faced Scotch ewes with some merino rams by way of experiment, which cross, however, he had not found a success, as the sheep were not hardy enough for the mountains, so he had given it up. I asked him if he had put any of his ewes previously "tupped" by the merino rams to black-faced rams again afterwards. He had done so, but, on thinking, he could not give a single instance of the subsequent black-faced lambs showing any affinities to the merino. Now merinos are the oldest and most established breed of sheep, and they would doubtless be prepotent over most other breeds and would be more likely to give an instance of telegony if such a phenomenon existed. Professor Cossar Ewart has done more to investigate this theory than any other experimenter that I am aware of. He has crossed different breeds and varieties of horses, donkeys, dogs, cats, rabbits, pigeons, etc., with a view to ascertaining the validity of the theory, in fact he admits he commenced experimenting fully convinced of it, but in all his experiments he has only had negative evidence. The mares from which he bred his zebra hybrids have been subsequently "covered" by horses, but in no case have the resulting foals shown the least resemblance to the zebra. The zebra is prepotent over the horse, so that this negative evidence goes very strongly against the theory.

We are told that if thoroughbred mares be crossed with cart horses, any subsequent foals they may have to thoroughbred stallions will be likely to have large cart horse like heads. But is this so? I venture to think if it does occur it is dependent on the pedigree of the mare or the subsequent sire being at fault.

The above are merely isolated instances, and are only at the best negative to theory and cannot be said to actually disprove it. If we look for a moment at the extent of our present knowledge of embryology, I do not see how the theory is tenable if we accept any one of these embryological theories. It appears to me that no theory lends itself more easily to experiment on than this, and I hope all present this evening will make a point of enquiring into all so-called cases of "infection" which they may come across, and also try to do some original work of their own to clear the matter up.

Before concluding I should like to say a few words about what is known as "maternal impressions." This theory holds that a pregnant female may be so affected by some fright or impression she may receive during her pregnancy, that the fœtus in utero may be seriously influenced. This is quite as universal as the theory of telegony, but I am inclined to think there is more ground for it, or at least for one part of it.

If the female animal receive any great fright, as cows or sheep being chased by dogs, or is in very adverse environment while pregnant, there is quite a possibility of some arrest in the development of the fœtus occurring. This is believed to be one of the causes of monstrosities.

In support of this much valuable evidence has been adduced, and also it is a well-known fact that chickens in eggs during their incubation may be affected by severe thunderstorms, or by any great noise to which they may be subjected. Every poultry keeper knows how important it is to keep the eggs in a quiet place during incubation. A gradual or continuous noise does not seem to hurt them even if loud, but sudden noises as hammering, banging of doors, thunderstorms, etc., frequently give rise to a large percentage of monstrosities, even if they do not kill the developing chick. Actual fact has shown this time and again.

Another, and I think less tenable theory is that the fœtus may be influenced by the surroundings on which the mother looks during her pregnancy. Many breeders believe that if pure bred Aberdeen-Angus cows are pregnant to equally pure bred bulls of the same breed, and are during this period kept in byres or boxes with whitewashed walls, the calves will show an abnormal amount of white about them. Even in pure cattle of this breed there is frequently some white under the belly and about the udder or scrotum, though all the rest is uniformly black, and I venture to think any extra white occurring is either a coincidence or a myth. It is also said that if similar cows are pastured along with red cattle the calves will frequently be red. I should be interested to see such a case!

The following idea was propounded to me by one who should have known better, but it will serve to show what faith can do! My friend said if he took a bull-dog bitch and had her "lined" in total darkness by an Irish terrier dog and then removed her so that she never saw the dog and put her along with a greyhound till she pupped, that the pups would be more like greyhound crosses than like Irish terrier crosses. He said a greyhound bitch would do equally well to keep the bull bitch with to prevent any mistake. Perhaps he thought that had his bull bitch been kept with cattle in a byre the pups would have shown bovine affinities, but I did not ask him. Such a theory as this, which I believe is more common than one might suppose, requires no contradiction before such an audience.

In this paper, as I said at the outset, I have not tried to promulgate any new theory, nor yet to dogmatise on anyone. All I have done is to try to formulate the extent of our knowledge which, when all is said and done, is very scanty, as it relates to the real laws of heredity. There is still much to be learnt of these laws as they apply to the varied phases of animal life.

I think, however, scientists are too apt to overlook the facts which every-day life puts before them and the practical man too prone to scoff at theories. Till scientist and breeder work together hand-and hand more than is done at present, little progress can be made in the way of science materially helping the breeder.

Such a subject as this I have found very difficult to treat in a satisfactory manner, and I fear that my treatment may appear somewhat disjointed. If so, I must ask your indulgence.

I certainly hope that the paper may lead to a good discussion, as I feel convinced that those views which I have ventured to assert will be very different from those of most present, for I think every one has opinions of his own on the theory of heredity.

## "MAKING A NOISE."

W. A. Byrne, M.R.C.V.S., Roscommon.

[At the meeting of the Irish Central V.M.A. at Dublin.
Continued from p. 630.]

I fear I have selected a rather unhappy title for the short paper I purpose submitting to you to-night. We must all admit that there is already too much noise, too much talk, too little action. "The shallows murmur while the deeps go dumb." "A shut mouth is sweet."

But I have not scared away all my friends; and one of them wrote to me this morning to say—only that it happened to be absolutely impossible for him to get away to-day he was prepared to break through an evil habit of his professional life, and attend his first veterinary meeting in order to hear me making a noise. I shall be very short.

Yet I have not selected the title of this paper from the point of view of the sub-editor of an evening newspaper, but because it smacks not of the text-book

or the midnight oil, because it is vague and unscientific.

In writing a certificate as to the result of an examination of a horse as to its soundness veterinary surgeons speak of "making a noise." The use of such a phrase by scientific men is vague, unscientific, and dangerous, because it may mean anything or nothing. It commonly covers a looseness of diagnosis which is not creditable, and suggests the existence of disease in what may be a perfectly sound animal. I therefore wish to direct your attention to the present position of the profession with reference to the examination of the condition of the wind in horses.

In examining a horse's wind I take it we wish to ascertain whether the larynx is healthy, or whether the well-known condition known as paralysis of the larynx exists. In "Laryngismus paralyticus" the left recurrent nerve is paralysed, the abductor muscles of the arytenoid cartilage, which this nerve supplies, become atrophied and useless, and the left arytenoid cartilage, dropping from its normal position, falls downwards and inwards. In doing so it diminishes the size of the glottal opening, and offers a considerable impediment to free respiration. And as the paralysis of the nerve and the atrophy of the muscles increase until they become complete, the obstruction to respiration increases also until it seriously interferes with the active work of the affected animal.

It is of the most vital importance that veterinary surgeons should be able to recognise the existence of this very serious unsoundness—a disease which progresses until it renders the animal useless for the work to which it is suited.

But it is also of very great importance that in their eagerness to detect paralysis of the larynx veterinary surgeons should not affix the stigma of this disease to perfectly sound animals. And I very much fear—and that is the reason I bring this subject before you to-night, that in Ireland at all events numbers of perfectly sound horses are rejected as whistlers every year. This causes a serious loss to the owners of the horses, and it does something more. It tends to lower the estimate of the value of a veterinary examination. If, in the course of years, a man buys a number of horses which have been rejected as whistlers, and if he finds that many or all of them retain unimpaired for years their capacity to do the work for which he bought them, and which a veterinary examination declared them unfitted for, he will naturally begin to doubt the usefulness of any veterinary examination. And I know, and all of us who examine horses and live amongst hunters, know such cases.

How do such things happen? They happen because veterinary surgeons do not make allowances; because they are very anxious to safeguard the interests of those who employ them; and because they wish to protect their own reputation.

May I suggest that veterinary surgeons do not make enough allowance for the numerous evanescent conditions which temporarily induce symptoms similar to those evinced in paralysis of the larynx.

When a horse is out of condition his muscles lack tone. We all remember the important, constant, and wearing work done by the posterior crico-arytenoid muscles. To do their work of abducting the arytenoids and dilating the glottal opening they must be in good condition. If they are not up to their work whistling may easily be caused. Exhaustion after prolonged exertion will produce the same effect on these important muscles.

Great pain or constant irritation will undoubtedly cause sufficient temporary irregular contraction of the arytenoids to make the horse whistle.

Inflammatory thickenings following strangles, etc., may cause a noise which simulates that produced by paralysis of the larynx, and such noises very frequently cease when the animal is properly treated.

I may say also that very many perfectly sound horses may be made to make a noise if ridden in bits to which they are not accustomed. Over and over again I have made horses whistle by riding them in a bit and bridoon, holding them hard, and making them gallop in a circle, and the same horses could not be got to make a noise when ridden straight in a snaffle.

But the horse "makes a noise" and in a regrettably large number of cases that is considered enough. Time is too limited, the task too onerous, the risk too considerable, to permit the scientific investigation of the matter. And if by hook or by crook, by any system of trial, the noise is detected the horse is branded as a whistler—though, as I assert, in very many cases such animals are perfectly sound.

I submit that the noise made by a horse out of condition, in ill-health, suffering pain, or from the effect of exhausting work should not be considered sufficient to justify the assumption that he has a paralysed larynx.

At the present time I reject a horse, if at any pace, at any period of his examination I detect the slightest noise analogous to the characteristic whistle. I do that to protect my employer, for the great majority of those for whom we in Ireland examine horses offer them for sale again. It would be a serious thing for the purchaser and a fatal thing for me if a number of horses passed by me as sound were rejected within a short time of my examination. It is because I recognise my powerlessness to effect a revolution on my own account that I bring this important subject forward to-night, in the hope that something may be done in the direction of its further elucidation, and arranging a standard more scientific, more exact, more satisfactory, and more creditable than—"Making a noise."

### Discussion.

Mr. McKenny thoroughly agreed *in globo* with the remarks that had been made by Mr. Byrne in his very practical paper. They always tried to agree—of course sometimes there might be differences, but on the present occasion their views on the question discussed were for the most part in harmony. Mr. Byrne objected to the use of the expression "making a noise," well, so did he, but could they avoid it? When they said to a client "that animal is making a noise" he understood what was meant to be conveyed; but if they spoke of "paralysis of the arytenoid cartilage" he would be quite at sea. They ere generally dealing with people who were uneducated in these matters, and they had to use phraseology that would be understood. Now as regards testing a horse as to his theoretical and practical soundness, did it necessarily follow that because a horse had a local affection of the larynx that he was practically unsound for work? He held that such was not the case. A "noise" was really only a symptom, and many well known race-horses were affected with "whistling" and "roaring" and yet proved themselves very useful both on the flat and over the country. He often examined horses at the Dublin Show which he condemned as they were "whistlers," but a few months afterwards at Ballinasloe or Mullingar the same horses might be sound, and of course if so he then pronounced them sound. Any horse that "whistled" on being galloped should be condemned as unsound, for although the animal might be able at the time to perform his work satisfactorily, yet there was always a beginning, and the noise "whistling" was usually followed by something that rendered the horse less useful than he previously had been. He (Mr. McKenny) therefore always condemned a horse as unsound when it made a noise. At the same time if the shrill whistling noise was to be heard the same both in the inspiration and expiration, he considered in such cases

that it might be due to a temporary thickening or dryness of the mucous membrane, and if the horse exhibited any symptoms of having a sore throat, or getting or having a cold, he always remarked these facts, adding that the unsoundness therefore might be only temporary. The large majority of these cases sooner or later became permanently unsound; therefore in honesty to our clients and ourselves we should always condemn as unsound a horse that was "whistling," even although at the period it was but slight, and did not interfere with the animal's usefulness. He would much prefer to hear a horse at first make a decided whistle, and, on being severely galloped, blow clearer than when the reverse takes place.

He could not agree with Mr. Byrne *re* the use of the bridoon, he thought they should avail themselves of every reasonable means to secure a thorough examination.

Mr. BYRNE explained that he had not really offered any opinion as to the advisability of using it; what he meant to convey was that by its use you could make almost any horse exhibit a "whistle."

Mr. HOWARD thought if he understood Mr. Byrne's remarks correctly that the principal point was that a great many horses were cast in this country as unsound when they were really believed to be perfectly sound. They were cast as making what he called a "noise." He took it that what Mr. Byrne desired was that something should be done to put a stop to the practice referred to. In any case where there was anything approaching to true paralysis of the larynx or disease of the nerve that the noise will be of such a character in that case that there will be no question about certifying to the unsoundness of the animal. What Mr. Byrne probably referred to was a slight "whistling" when you sent the horse along for a gallop. Unfortunately when they examined a horse for soundness they really did so, remembering that in all probability the animal would be examined at no very far off date by another V.S., and this might tend to modify the character of their opinion. It was likely that unless they could educate their clients into a knowledge of the difference between real unsoundness and the presence of a slight "noise" they would have to go on branding horses as "unsound" for fear of their professional opinion being subsequently stultified. They should live under the grievance. A man who was a keen judge of horses would very often chance an animal, especially for his own use, which he might in self defence be compelled to stigmatise as "unsound" if judged for a client. He would like to get Mr. Byrne's views as to the propriety of condemning a horse which exhibited a "grunt," especially a horse over five years old.

Mr. CLEARY had no doubt of the importance to veterinary practitioners of Mr. Byrne's paper. It was a subject that came up for consideration every time a horse was examined, and there were difficulties connected with it which he thought would never be overcome. In examining a horse for his wind their reputation as veterinary surgeons depended not so much upon their own ability to perform the task as on the ability of the veterinary surgeon who came after them. By far the larger portion of the horses examined by Irish veterinary surgeons are bought to be sold and examined again in the near future. From a commercial standpoint the necessity of both veterinary surgeons agreeing is obvious, and it is this fear of one's opinion not being ratified at some future date which makes practitioners over scrupulous. As to the term "making a noise" it is a convenient way of explaining a situation which we cannot well define. Personally, I believe there are many horses make a noise and whistle which are absolutely sound of their wind, but am I on examination to pass them? or, in other words, am I to take the world as I find it, or start remodelling it to suit my own views? Some animals whistle when ridden in a double rein bridle. They are for the most part high tempered creatures which grow annoyed with the conditions imposed on them by the bridle, and manifest their dislike to it by whistling with the wings of their nostrils. It is easy to distinguish such sounds from those caused by disease. I once came across a very peculiar case in Co. Roscommon. It was a horse which emitted a pronounced whistle when galloped in a ring to the left. Going straight forward or to the right he blew perfectly sound. If veterinary surgeons are agreed—and personally I think they are—that it is possible for a horse to "make a noise" or whistle and at the same time be sound, the solving of the difficulty pointed out in Mr. Byrne's paper consists in educating the public to the recognition of this view. It is a matter which for the most part rests with the older and better known members of our profession who have their reputation established. For the present I would not recommend young practitioners starting in life to pass horses which "make a noise" or whistle, even though they are inclined to do so.

Mr. HEALY said as veterinarians they all knew that in latter day practice "whistling" had become more prevalent. He did not know if that had been their experience to the same extent as his, but certainly in his county it was the case. His opinion was that a great deal of it was due to the condition in which you found the animal when examining, and to the way in which young horses were reared. In his district when yearlings they are housed during the winter, from November till March, and then when put out on grass they invariably catch cold, with the result that when they are examined as three year olds they are found to be making a noise. Horses that are reared altogether in the open air with good shelter in the winter, in his experience keep sound except when there is any hereditary tendency. In three year olds you often find a moist whistle, which never did a horse any harm, but when he heard a distinct sound of permanent whistling in a five year old he should invariably stop him, that was one decision concerning which he never varied.

Mr. BYRNE, in reply, said the discussion that had taken place that evening was sufficient justification—if any were needed—for the paper he had submitted. In the absence of any scientific standard by which the soundness of a horse's wind should be judged, he feared things were coming to such a pass that any illiterate groom in the country would soon consider himself as good a judge of a horse's wind as veterinary surgeons themselves. He was not prepared that evening to do more than point out the importance of the matter, and urge the necessity for seriously considering it with a view to definite action in the near future.

## NORTH OF ENGLAND VETERINARY MEDICAL ASSOCIATION.

The annual meeting was held at the Douglas Hotel, Newcastle-on-Tyne, on Friday, February 26th, 1904. The following members attended: Messrs. W. Hunter (president), J. Davidson, Thos. Parker, Geo. Elphick, and H. S. Elphick, Newcastle-on-Tyne; T. Kilburn, Warkworth; A. Chivas, Corbridge; F. Pickering, Hexham; G. Craik, Alnwick; W. Lawson, Rothbury; A. Gofton, North Shields; G. R. Dudgeon, Sunderland; J. Aitken, Chester-le-Street, E. R. Gibson, Seaham Harbour, hon. sec.

The following visitors were present: Prof. Dewar, Edinburgh; Prof. Gilchrist, Durham College of Science; Captain W. A. McDougall, A.V.D., The Barracks, Newcastle; Frank Richardson, Rainton; P. Braid, Seaham Harbour; and Mr. John Hunter, Newcastle.

Apologies for non-attendance were received from Prof.

Williams, Dr. H. E. Armstrong, and Mr. J. W. Ryder.

The minutes of previous meeting were taken as read.

Messrs. H. Peele, Durham; and J. P. Isherwood, Blyth; wrote resigning membership of the Association. On the proposition of Mr. Dudgeon, and seconded by Mr. Hunter, the resignations were accepted with regret.

Mr. F. RICHARDSON, Rainton, was nominated for membership by Mr. Dudgeon, and seconded by Mr. G. Craik.

Captain MCDOUGALL was nominated by Mr. G. Elphick as an honorary member, and seconded by Mr. Craik.

The SECRETARY read the financial statement, and intimated that the balance in hand was £6 10s. in excess of the previous year, which was considered satisfactory. It was unanimously adopted.

Mr. DUDGEON proposed, and Mr. Davidson seconded, "That at the next election of Council of the Royal College of Veterinary Surgeons the Association shall endeavour to bring forward and support a candidate to represent the North of England.

## PRESIDENTIAL ADDRESS.

W. HUNTER, ESQ., Newcastle.

Gentlemen,—I rise with mixed feelings to address you this afternoon. In the first place I beg to sincerely thank you for unanimously electing me your President for the ensuing year, but I feel you might have chosen a much more suitable man, for I can assure you I feel somewhat out of place and not altogether at my ease in the Presidential chair. I have once occupied this position before, but I feel no more qualified to fill it now than I did then. However, having accepted the responsible position I will certainly do my best to make our meetings entertaining, harmonious and instructive. We have had many good meetings in the past and with your forbearance and assistance we will have many more in the future.

No very pressing subjects are before the profession at the present time. Many thanks are due to Professor W. O. Williams and Mr. J. F. Simpson for the great tact and ability they have displayed in making it a fact accomplished the New Royal Army Veterinary Warrant. It benefits not only the A.V.D. but gives the whole profession a higher and a better standing. We are now in a position to give orders, which we were unable to do previously. I hope that officers of the Veterinary Department will now have control of the feeding and management of the horses as well as their treatment. I hope also that the War Office will see that it is to the country's benefit to employ an experienced officer of the Veterinary Department to buy remounts instead of employing an ex-Major of some other department to buy horses of which they know little or nothing.

As the profession is advancing it behoves us to keep up the educational test, I think every young man before entering College ought to be able to pass the examination set by the First Class College of Preceptors. When he does that he is an educated man and is looked up to as such, and I hope the Royal College will see its way to raise the standard of the preliminary examination.

In reviewing our position as veterinary surgeons our prospects at the present time are not so brilliant as I would wish. We are assailed right and left by electricity, this in our large towns and cities has done away with a great number of horses. In this city alone we have 350 fewer tramway horses, and a large decrease in the number of 'bus horses. Motor cars are also taking the place of horses, their numbers are multiplying, and many ladies are afraid to drive in their carriages owing to the horses becoming restive when meeting or being followed by these noisy and noisome smelling vehicles. Certainly at present they are only driven by the rich, and I hope it will be some years before we feel their effect pecuniarily.

Then, again, I think some members of our profession are doing us much harm by giving lectures on the diseases of animals for County Councils. I think a man can give one lecture in a district to farmers and horseowners and give them a good deal of general information, but when he gives a course of lectures and goes into the symptoms and treatment of certain diseases I think he is doing great injury to his brother practitioners, and I would ask the Royal College to warn such a man that he is acting unprofessionally and that he must desist, and if he persists to lecture after such warning I would strike such a man off the Register. Stockowners only attend these lectures to learn how to do without the veterinary surgeon. They persist in doctoring their animals and drenching them with any quantity of patent medicines until the poor brutes are *in extremis*, and then we are hurriedly sent for, often late at night, and find the animal has been ill a fortnight, and we are expected to work a miracle and get it better at once.

Speaking of patent medicines, I ask you in all seriousness if something cannot be done by us to lessen the sale of them. I seldom go into a farmyard or stable but I find some form or other of patent medicine is used. These medicines are not cheap; they cost the farmer quite as much as we charge for similar mixtures. I remember some years ago three large horse dealers in this city all of whom have now gone over to the great majority, telling me of a certain cough mixture which they used largely, and if I only knew what it contained my fortune would be made and I need not go visiting animals again. I took the trouble to find out the active and essential properties of that medicine, and the two chief were Tinct. Hyoscyamus and Acetate of Ammonia, a little of each mixed with a pint of water and coloured. This was sold at 2s. 6d. per bottle, which was one dose, the profit made being about 2s. per bottle. I have not attempted to sell this mixture and therefore I have not made my fortune. I have never yet in my lengthened experience come across a valuable patent medicine. The most of them are entirely useless—if not harmful, and yet they sell.

Another man who does the profession much harm is the veterinary correspondent of an agricultural paper. He answers all questions and gives plain and distinct prescriptions for any disease enquired about. How much does such a man get per week from the paper? Perhaps 20s. And how much injury per week is he doing his brother practitioners? I should say he would be doing them at least £100 per week. This should not be, and I would strike him off the Register if he persisted in his evil ways.

In the field of public health if only we combine and were a little more progressive and agressive a great number of appointments ought to be open to veterinary surgeons which are now filled by medical officers of health and ex-policemen. Who, I ask, is so fully qualified as a veterinary surgeon to act as an inspector of provisions such as animal food and milk? Medical men I know claim the right to say what is fit or unfit for human food, but they forget that they know nothing, or next to nothing, about animal diseases, and therefore I think they are not qualified to be inspectors. Take flesh meat. A medical man is called to examine a carcase. Well, he sees there is something wrong with it, but not knowing the diseases of animals and what parts are affected by certain diseases he is quite at sea, and frequently makes a mistake. Here are two instances. A few years ago there was an outbreak of anthrax. Four cows, I think, were slaughtered to save them dying, their carcases were examined by a medical officer of health and an ex-policeman who passed them as fit for food. Casually the under officer met a veterinary surgeon, and in the course of conversation these cases were

mentioned and he asked the V.S. to have a look at one of them, as it was close to. Directly the veterinary surgeon saw it he knew it was a case of anthrax and told the officer so, who hurried off to the medical officer who came and did his best to undo the mischief he had done ; but part of the other three were already sold and eaten.

The next case was where a butcher was summoned for offering diseased meat for sale. The medical officer of health swore on oath that the carcase was emaciated and the animal when alive had suffered from jaundice, and the flesh was entirely unfit for food. The veterinary surgeon for the defence swore that the carcase was thin but certainly not emaciated, and there was no jaundice whatever, but the flesh of a naturally yellow colour. The case was dismissed. Gentlemen, we all know how yellow the flesh of all Jersey and Guernsey cattle are, but to say they are all suffering from jaundice, as a medical man would tell you, proves to me that medical men are not fit to be inspectors of provisions. And why should medical men and policemen have to do with the inspection of cows and dairies. Have medical men not sufficient to do in their own sphere by trying to stamp out small-pox and scarlatina? Veterinary surgeons of the present day are quite as far taught as medical men in bacteriology and the use of the microscope. At the Royal College this department is presided over and taught by Professor M'Fadyean, who is not only a veterinary surgeon but who holds the degree of Bachelor of Medicine and Master of Surgery. He is also a B.Sc.

The Board of Agriculture have their troubles, and appear to me quite unable to stamp out either glanders or swine fever. I am not sorry for them, but I am not sure that they desire these diseases stamped out, for if they were what would become of those valuable scientific servants they have engaged. After having been employed by the Board in this scientific work and not being longer required, is it likely they would again get employment in the Navy or Army, or in a tailor's shop.

Glanders in my opinion could be easily and rapidly stamped out. I know the first cost would be great, but I consider it nothing to a rich country like this to get rid of such a loathsome and dangerous disease. And having once stamped it out we could easily prevent it again being imported. I am blamed for spreading this disease, but I am blamed unfairly. I tested a number of horses two years ago where there was an outbreak of glanders, eight reacted to the mallein test, in which I thoroughly believe. I advised that these eight horses be isolated and tested weekly until they ceased reacting. All ceased to react after five injections. All these animals, as far as I can trace, except two which have died, have remained healthy up to the present time. Two of them I have made post-mortems of after dying of bowel complaints, and not one sign of glanders ever having been there could I trace. A horse which had never been tested by me was sold from this establishment and must have carried the disease to Alnwick, but the authorities would like to blame one of the eight which were cured, although the owners told them that the horse they sold was never tested. I have a horse at the present time isolated for glanders. He reacted badly on the 19th of last September. I kept testing him at intervals until he ceased to react, which was the 20th of November ; since then he has not been interfered with until last Sunday night, February 21st, when he was again tested and unfortunately reacted. No clinical symptom has ever been present, not even a submaxillary gland swollen, and his legs are as fine as possible. I expect the owner will now have him slaughtered and the post-mortem will be an interesting one. My opinion is that the disease had got too great a hold of his lungs before I got started with mallein for it to do much good. I cannot get an answer to the question how long glanders can remain in a horse's system without developing clinical symptoms. This horse has been isolated five months and yet he has the disease in his system. Professor M'Fadyean says that it is a benign disease, and many horses are found on post-mortem to have suffered from glanders and to have recovered spontaneously. Until greater compensation is paid for animals which react to mallein the disease will not be stamped out, but will increase.

Swine-fever seems as far from being stamped out as ever. The way the Board of Agriculture have shuffled the cards, in the altered appointments of veterinary surgeons, have caused much friction. I am not an inspector, and I don't often come across the disease. I occasionally do. Some time ago I was called to make a post-mortem of four little pigs which had been castrated by the farmer at midday, and were all dead in four or five hours. I found they had all died from acute peritonitis as the result of castration. I examined the bowels and found one specific diagnostic ulcer, showing that although apparently healthy they had the disease upon them and were not in a fit state for castration. A month ago I made a post-mortem of another pig, in the County of Durham. He died of double pneumonia, but on opening the colon a number of black old ulcers were found, so I ordered the whole of the internal organs to be placed in a box and sent to the Board of Agriculture. What they said or mean to say on seeing the lungs and bowels cut I have not yet heard.

There are other subjects which I might have mentioned, such as serving on juries, and the new University Degree; but as Mr. Parker has kindly consented to read us a paper on Rinderpest which he saw in South Africa, I will desist, and beg to thank you for listening to my disjointed remarks so patiently, and I only hope our Association will increase numerically and that I may be able to leave it in as flourishing condition at the end of my year of office as our late President has left it.

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Mr. G. ELPHICK, in proposing a vote of thanks to the President for his address, expressed the hope that Mr. Hunter might offer himself as a candidate for Council of the Royal College.

Mr. DUDGEON seconded the proposition.

The PRESIDENT, in reply, regretted that he would be unable to accede to the request.

## NOTES ON RINDERPEST IN S. AFRICA.

By THOMAS PARKER, M.R.C.V.S., Newcastle-on-Tyne.

Mr. President and Gentlemen,—In thanking you for the honour you conferred upon me by asking me to read a paper at this—the annual general meeting, I wish to add that while surrendering to the invitation I felt somewhat embarrassed. I should have felt far more comfortable had I been here with the object of listening to a paper from one of the older and more experienced members of the profession. However, difficult as the situation may be, perhaps the best method of escape is to face the difficulty.

Diseases are plentiful, all are interesting, and the majority of them have been discussed over and over again, consequently the writer is invariably confronted with the difficulty of selecting one which is sufficiently interesting to induce every member to take part in the discussion. The paper I read for your discussion to-day, gentlemen, is on Rinderpest.

The history of rinderpest, as you know, takes us back generations, and is said to be as ancient as that of the inhabitants of the Steppes of Eastern Europe and Central Asia. The disease is said to have been brought for the first time to Western Europe by the migration of nations in the fourth century, and by the migrations of the Huns from Central Asia, of the Alans from the

Volga, of the East Goths from Southern Russia, and of the West Goths from Northern Hungary. Since then it has remained a resident in Western Europe, causing severe losses. From 1745 to 1752, the loss in Denmark alone amounted to 2,000,000 head. The total loss in Germany up to the end of the eighteenth century was reckoned at 30,000,000 head, and in Europe at 200,000,000 head. It has been said that the ravages of rinderpest were the chief reason for the founding of veterinary colleges, which began to spring up at that period. And, taking that for granted, perhaps one would not be far wrong by stating that we in all probability owe our presence here to-day to the disease about which I am speaking. It destroyed between three and four millions of cattle during the year 1792 in Italy, into which country it had been introduced by oxen which were intended to be used as food for the Austrian Army. From 1795 to 1801 it raged in Southern Germany, and was widely spread by the wars of Napoleon (1805-1809), and by the wars of Liberation (1813-1816). In 1844 it was introduced into Egypt from Roumania and Anatolia, with a loss of half a million cattle. Russia lost a million cattle in 1844 and 1845. Austria it is stated lost nearly half a million cattle during the years from 1847 to 1864. During the war in 1870-1871 70,000 cattle died in France, 30,000 in Alsace-Loraine, and 10,000 in Germany.

In 1865 rinderpest was imported into this country by Russian cattle. It was, however, stamped out the following year, after a loss of over five millions sterling. In the year 1872 it was again introduced from Russia into this country, but its spread was quickly stopped. Its last appearance in this country was in 1877, on which occasion it caused a good deal of loss before it was annihilated.

Rinderpest, also known as Cattle Plague, Steppe of Murrain, and Bovine Typhus, is a contagious disease peculiar to ruminants, characterised by ulcerative and necrotic lesions—particularly of the true stomach and intestines, facility of dissemination, and great mortality. Although I have only seen it in the bovine species, it is said to be transmissible to sheep, goats, deer, buffaloes, camels, gazelles, etc., and, according to some writers, also to pigs. In England we say this disease is exotic, but if we were at present holding our meeting in South Africa we might almost be pardoned for describing it as indigenous. It is readily spread by either mediate or immediate contagion. Time after time investigators have endeavoured to find the cause of this disease, some even going so far as to describe bacilli. There is not the slightest doubt, however, that it is due to a bacterium, but an exact description of it probably still remains unknown. The period of incubation is from 3 to 7 days. The course of this disease is somewhat indefinite. In some cases it lasts only a day or two, whilst in others it may extend to a week or two. There is no disease which more surely and rapidly spreads, and this is not difficult to understand, as the virus is present in both excretions and secretions. Often, in South Africa, not long after an animal dies, vultures may be seen at work pulling the carcase to pieces, drawing out the intestines, etc. Then, after having had a good feed, will proceed elsewhere and thus spread the disease. Again, dogs belonging to Kaffirs, other animals, and even the Kaffirs themselves trekking about the country, in all probability spread the disease.

### Symptoms.

In the outbreaks with which I had to deal, the symptoms noted were as follows: There is a tendency on the part of affected individuals to separate themselves from the remainder. One first notices that there is dullness, loss of appetite, not ruminating, lying down, and not inclined to rise, coat dull in appearance, generally miserable, and high temperature. In some cases there was never any discharge from the eyes, nose, or mouth before death, whilst in others there was a flow of frothy saliva from the mouth in large quantities, and in others again there was also discharge from the eyes and nostrils. In the majority of cases there was dryness of the mucous membranes at the outset. In some cases there was never diarrhœa, whilst in others only a few hours after the first appreciable symptoms diarrhœa was evident, *e.g.*, the fæces in some cases was somewhat thin, whilst in others it was extremely so, running away from the anus and rather light in colour, like an amber-coloured mucous fluid. In many cases the fæcal matter, in the last stages, was blood stained, and in some instances contained an admixture of pieces of mucous membrane. Loss of flesh was invariably rapid. The animals when down were constantly grinding their teeth and as an evidence of abdominal pain one could hear a characteristic short grunt, which was invariably repeated about as regularly as the respirations. Some would be lying fully stretched out on their sides, whilst others lay down with their head and neck turned back towards the loins and in many instances died in that position.

*Post-mortems* on 3 oxen, Harrismith, O.R.C. Lungs healthy in two cases, the other exhibiting a slightly emphysematous condition in parts, and congestion. The heart muscle was in all cases rather flabby or a trifle softer than normal. The kidneys showed slight changes, the cortex being darker than normal and slightly congested. Liver apparently normal. Gall bladder distended owing to obstruction, the mucous membrane showing evidence of inflammatory changes, the bile had generally a deposit of flocculent material and sometimes blood-stained. The mucous membrane of the urinary bladder also was slightly inflamed. Rumen apparently normal, as also the reticulum. Omasum, the mucous membrane of some of the leaves was slightly inflamed. Abomasum or true stomach very highly inflamed. The intestines, particularly the small, were highly inflamed, and the mesenteric lymphatic glands were enlarged and congested. The rectum in many instances was somewhat protruded.

*Post-mortem*, two-year-old heifer, near Ladysmith, Natal. In this case the stomachs were normal. The mucous membrane of the small intestines was very highly congested. The gall bladder was full of dark bile which had a deposit of mucous-like material. Urinary bladder healthy in appearance. Lungs, evidence of interstitial pneumonia. Liver soft, bile stained, having a clay-coloured appearance. Kidneys, yellowish staining.

*Post-mortems* on calves, Brandfort, O.R. Colony. On arrival to investigate outbreak of disease amongst eight calves, two were found dead. Of the remaining six, three were lying down, all had a discharge of watery mucus from the eyes and nostrils, and one or two were affected with diarrhœa. The respirations were short, laboured, and with a grunt. Lungs and heart apparently healthy, the first three stomachs also were normal. The abomasum in all of them exhibited inflammation of mucous membrane. Duodenum and remainder of small intestines were very highly inflamed, the mesenteric lymphatic glands being very much enlarged. Urinary bladder healthy. Liver healthy. Gall-bladder distended with bile together with slight deposit of flocculent material. The mucous membrane of wall of gall-bladder was congested. Kidneys very slightly congested. Otherwise the carcases were in splendid condition, with plenty of abdominal fat.

It has been noticed that, according to post-mortems, the lesions met with will be found to vary according to the age and condition of the animals and the degree of the disease.

### Treatment.

This may be brought under following headings, namely :—

1. Immediate destruction of all affected animals and those having been exposed to infection.
2. Prophylaxis.

*The destruction of animals* in connection with outbreaks in this country was undoubtedly a decided success; but whether it would pay to resort to these measures in other countries—like South Africa for example—*at all times*, is open to discussion.

*Prophylaxis or preventive treatment* of this disease has been shown by practice to be simply invaluable. Various methods of protective inoculation against the disease have been employed, namely :—

1. By defibrinated blood.
2. Subcutaneous inoculation (virulent blood and serum.
3. By serum.
4. The bile method.

Defibrinated blood and serum are obtained from animals considered to have acquired immunity. Although I have had no experience with these methods I have no doubt that the serum method in time will be greatly used. The serum and bile methods are at the present time more commonly employed, I believe, than any other.

Inoculation with bile obtained from animals immediately after death or killed at the point of death, whether considered as conferring active or passive immunity has, at any rate, in my experience proved of some use, *e.g.*, while camping in the East of Orange River Colony, we had an outbreak of rinderpest amongst our oxen which numbered about a thousand. Within 24 hours of our noticing the outbreak, about 50 of the animals were sick and 10 dead. During the next two days the whole of the living oxen were inoculated with bile. As far as possible segregation was carried out. This outbreak resulted in a loss of less than 50 head, and after a week or two the remainder got fit and well and actually put on flesh while doing their hard labour.

Having stated what I thought to be the main points of what I saw of the disease in South Africa during the late war, I wish to conclude by thanking you for your attention. I hope that my notes have been sufficiently interesting as to cause a good discussion.

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A discussion followed. Professor Dewar, in the course of his remarks, stated that he had not seen the disease in this country and would be surprised if it ever recurred. He had hoped for more enlightenment as to the preparation and administration of serum and bile to animals suffering from the disease in South Africa.

Captain McDougall described cases as seen in India Messrs. G. Elphick, H. S. Elphick, G. Dudgeon, and the President also took part in the discussion.

Mr. Parker having replied, he was awarded a hearty vote of thanks and the meeting concluded.

### The Dinner.

The annual dinner followed, Mr. Hunter again presided.

After the loyal toasts had been honoured, Mr. J. Davidson proposed "The Navy and Imperial Forces," coupling the toast with the name of Captain McDougal, who, he said, they heartily welcomed.

Replying, Captain McDougall said the warrant which had recently been issued had put the Army Veterinary Department on a footing it had never been on before, and when the new *régime* was in full working order the Department, he was sure, would be more efficient than it had ever been in the past.

Mr. G. Craik submitted "The Royal College of Veterinary Surgeons." In the course of his remarks he said he would like to see the representation on the Council of the College evenly divided throughout the country. The North of England, he thought, should be represented.

Professor Dewar, responding, said the Council was often criticised, and sometimes rightly criticised, but he thought the members did their best to benefit the profession. However, he thought that if the country was divided into electoral divisions, and the representation on the Council was evenly distributed, it would give the profession as a whole a greater interest in the College. Professor Dewar expressed himself in favour of the preliminary veterinary examination being raised to the level of the medical preliminary as required by the Medical Council.

"The North of England Veterinary Medical Association" was given by Capt. McDougall, and responded to by the President. Without combination, he said, they could do very little. He would like every member of the profession in the North of England to join the association. The membership had increased during the past year, but he hoped it would still further increase in the future.

The concluding toast, "The Visitors," was proposed by Mr. Dudgeon, and responded to by Prof. Gilchrist. He said the time had come when all those instructed in veterinary and agricultural work should combine to put forward the education side more strongly.

Capt. McDougall and Mr. John Hunter also replied.

The proceedings were pleasantly enlivened by the musical efforts of Messrs. Harry Elphick, G. Craik, E. R. Gibson, and Brownie.

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## DISEASES OF ANIMALS ACTS 1894 to 1903.

### Summary of Returns, Week Ending April 2, 1904.

| Period. | | Anthrax. | | Foot-and-Mouth Disease. | | Glanders (including Farcy) | | Rabies. Cases Confirmed. | | Swine Fever. | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | | Out-breaks | Animals. | Out-breaks | Animals. | Out-breaks | Animals. | Dogs. | Other | Out-breaks. | Slaughtered * |
| Week ended April 2, 1904 .. | | 17 | 21 | .. | .. | 22 | 28 | .. | .. | 25 | 110 |
| Corresponding week in 1903 .. | | 19 | 27 | .. | .. | 29 | 51 | .. | .. | 29 | 114 |
| Corresponding week in 1902 .. | | 18 | 26 | .. | 47 | 29 | 60 | 2 | .. | 32 | 104 |
| Corresponding week in 1901 .. | | 15 | 44 | .. | .. | 15 | 20 | .. | .. | 96 | 341 |
| Total for 14 weeks, 1904 .. .. | | 288 | 390 | .. | .. | 390 | 747 | .. | .. | 345 | 1980 |
| Corresponding period in 1903 .. | | 223 | 350 | .. | .. | 332 | 589 | .. | .. | 382 | 1748 |
| Corresponding period in 1902 .. | | 220 | 383 | 1 | 77 | 314 | 603 | 9 | .. | 431 | 2226 |
| Corresponding period in 1901 .. | | 178 | 267 | 10 | 652 | 337 | 591 | 1 | 1 | 721 | 3506 |

Note.—The figures for the Current Year are approximate only.
Board of Agriculture and Fisheries, April 5th, 1904.

* As Diseased or Exposed to Infection.

## ALDERMAN J. PETHICK, J.P.

To the intense regret of the whole community, Alderman J. Pethick, J.P., succumbed at the Homœopathic Hospital, on Tuesday morning, March 29, to the grievous injuries which he sustained in the carriage accident on Saturday. From the time of his admission to the hospital, within a few minutes of the accident, his condition was regarded as exceedingly grave. Mr. Pethick was, however, endowed with so splendid a constitution and so vigorous a vitality that hopes were cherised of his recovery, On Sunday he appeared to make good progress. Conscious throughout, and clear in his intellect, he was able, so far as he was permitted, to enter into conversation with the members of his family on various matters. On Monday, however, symptoms of congestion of the lungs appeared, and the patient's condition grew distinctly worse. His son, Dr. C. Stuart Pethick, of Liverpool, remained by his bedside until after midnight.

### Biographical Sketch.

Essentially the architect of his own fortunes, Mr. John Pethick started life without any adventitious aids, but by sheer force of character carved out for himself a career which remains as a monument to his great business aptitude, indomitable enterprise, and untiring energy, and an inspiration to youths of humble birth ambitious of success. Mr. Pethick was born at Crabtree on July 19th, 1827, his father being the manager of the Dartmore Granite Works, which the firm of Pethick Bros. now own. As a boy he had not the facilities for acquiring a good education which the lads of to-day enjoy. Leaving school at the age of 12, he commenced work in the following year, and learnt the trade of a carpenter in Mr. Pope's yard at Turnchapel. Possessing great natural abilities, he early achieved the reputation of being one of the most skilled craftsman in the district. When 25 years of age he entered into partnership with Mr. Benjamin Call as builders and contractors. The partnership lasted nearly 20 years, and during that time the firm, which became noted for its enterprise, carried out many important works. The Soap Works in Sutton Road, railway stations at St. Thomas, Exeter, Newton, Kingswear, and on the Moretonhampstead branch, and the Duke of Cornwall Hotel and Chubb's Hotel at Plymouth, were erected by Messrs. Pethick and Call, and were among the works which helped to establish their reputation. They were also the builders of Elliot Terrace, Hoe Park Terrace, Hoe Park Place, Headland Park, and part of Clifton Street. In 1871 the partnership was dissolved, Mr. Pethick retaining the business, which is now carried on by his sons.

One of the first of Mr. Pethick's large contracts after the dissolution of his partnership with Mr. Call was the erection of Plymouth new Guildhall and Municipal Buildings, which were opened by the King and Queen, then the Prince and Princess of Wales, in 1874. How well Mr. Pethick executed the contract, the condition of the magnificent pile of building to-day is a sufficient testimony. For many years the deceased was also a Government contractor, and was entrusted by the Admiralty with several important contracts in the West of England. No. 3 dock at Devonport Dockyard was constructed by him at a cost of £150,000, and the Royal Naval Engineer Students' College at Keyham, erected at a cost of £30,000, was another important work which he carried out. When not engaged on large public contracts he embarked in a good deal of speculative building in Plymouth, and the town owed in no small measure in the seventies and eighties the extension of its residential area and the clearance of some of its slums to his initiative and enterprise. At Mutley several hundred houses were built by him. He also erected the Grand Hotel on the Hoe and the first block of workmen's dwellings known as Bates's Buildings, at Plymouth, and Kelly College, Tavistock. Railway development in the West also claimed a share of his superabundant energy. With Mr. Relf he constructed for the London and South-Western Junction Railway Company the independent line from Lydford to Friary, which was opened in 1886. Previously the South-Western Company had access to Plymouth only by running powers over the Launceston branch of the Great Western Railway from Lydford. The construction of the South-Western Junction Railway gave the London and South-Western Railway for the first time an independent double line right through to Plymouth. Just over 22 miles long, the line cost nearly £800,000. Besides numerous cuttings, it comprises two long tunnels and a number of viaducts, of which the one spanning the River Tavy is, in particular, a notable specimen of the builder's art. Although the work was exceedingly heavy, the line, with its several stations, was completed within the specified time of three years. Going further afield, Mr. Pethick carried out numerous other large contracts. In conjunction with his sons he constructed the Vale of Glamorgan Railway, extending from Barry to Bridge End, a distance of some 22 miles. At Blagdon, in the Yeo Valley, he constructed for the Bristol Corporation the sixth largest reservoir in the kingdom. Among other important works which he carried out, in association with his sons, in the later years of his life, was the construction of the Vale of Rheidol Light Railway from Aberystwith to Devil's Bridge, the laying of the foundations and erection of the piers for the new Vauxhall Bridge across the Thames, and the widening of London Bridge. All these large works, some of them attended with considerable engineering difficulties, necessitating the highest skill and resolution to overcome, were executed with the thoroughness, solidity, and finish which characterised all Mr. Pethick's undertakings, and raised his firm to the high position it occupies in the country.

Amid his many business activities Mr. Pethick found time to devote to local affairs, in which he took a keen interest. In 1874 he entered the Town Council as councillor for St. Andrew's Ward, which he continued to represent until his election as alderman. In both capacities he served the town with fidelity and zeal, his special knowledge of public works enabling him to render valuable service by his sound judgment and advice upon many matters. For two years he served Plymouth in the high office of Mayor. The circumstances under which he was first elected in November, 1898, were unique in the annals of the borough. Owing to an unfortunate dispute between the two political parties in the Council, both declined to nominate a Mayor, and the meeting convened to choose the Mayor ended in a fiasco. The Council met again the next day, when Mr. Pethick, in response to urgent appeals, consented to accept the office, and was unanimously elected. His election was highly popular throughout the borough. His patriotic action in rescuing the town from a very undignified position earned for him at once the gratitude of the burgesses, and the feeling was deepened by the thoroughness and devotion with which he entered into the duties of the office. At the end of the year he was unanimously re-elected. His Mayoralty was a very busy time municipally. During that period Plymouth was visited by a number of societies and distinguished bodies, including the Treasurers' and Accountants' Institute, the National Veterinary Association, the Incorporated Society of Musicians, the Trades Union Congress, the High Court of Foresters, the National Society of Contractors and Builders, and the Chemists, Postmens, and Mechanical Engineers' Society. To them all Mr. Pethick extended a welcome which worthily upheld the traditions of Plymouth for its hospitality. The High Court of Foresters marked its appreciation of his "generous hospitality and general kindness" by presenting him with an illuminated address on vellum. The address declared that the welcome extended to the delegates by the Mayor was such that "their visit to the historical town of Plymouth will ever be associated with the most pleasant memories." In the Council Chamber Mr. Pethick was firm in his rulings, and though a little impatient of any tendency to waste time in debate, was ever one of the most genial of men.

A noteworthy feature which his Mayoralty brought out in clear relief was his catholicity of sympathy. Accessible to all, he placed his services at the disposal of all sections of the community in the most frank, hearty, and genial way, but in no direction, perhaps, did he give greater satisfaction than by the broad-minded and generous-hearted manner in which he acted towards the various religious bodies in the town. He showed the same kindly

courtesy in opening a Roman Catholic Orphanage bazaar or a Nonconformist sale of work as in encouraging the efforts to build additional churches by gifts of granite, or in contributing munificently to the rescue work of the Salvation Army. It was rightly felt that a Mayor with such broad sympathies set a good example to all who might be placed in the same exalted position, and that Mr. Pethick had well earned the thanks of his fellow burgesses for the able and tactful manner in which he discharged his duties as chief magistrate.

When the new lighthouse was erected on the Eddystone reef by the Trinity Board the greater part of the old Smeaton Tower was taken down and re-erected on the Hoe, every stone being carefully numbered and restored to its original position in the structure. It was found impracticable to remove the base of the old lighthouse, and Mr. Pethick at his own cost erected the present granite base. But for his generosity it is doubtful whether Plymouth would now have been in possession of the Smeaton Tower, which is so familiar a landmark on the Hoe. His action on that occasion was only one of many evidences which he gave of the spirit of local patriotism which animated him. One of his gifts to Plymouth was the "William" window in the Guildhall depicting the landing of the Prince of Orange at Torbay.

A keen lover of horses, Mr. Pethick was a strong supporter of the Devon County and other agricultural associations. At his country place at Yelverton he kept a choice little stud of horses for exhibition purposes, and he won many prizes at the county and local agricultural shows, where his familiar figure was always welcome. Until its dissolution some years ago he was also a strong supporter of the Plymouth Horse Show Society.

Mr. Pethick was also at one time keenly interested in horse racing, and he was a familiar figure at local race meetings. He was the owner for some years of Gamecock, a celebrated steeplechaser and prize winner in the show ring. Horses, indeed, were his hobby, and there were few better judges of horses in the county.

Mr. Pethick was for many years a justice of the peace for the borough of Plymouth. He was also a Freemason.

In late years Mr. Pethick spent most of the leisure which he could snatch from a busy and strenuous life at Down Park, Yelverton, the beautiful retreat which he built himself. The house is situated on one of the highest points of the moor, and commands magnificent views of the undulating country for miles around. Mr. Pethick married early in life, Maria, daughter of Mr. Oram, of Plymouth. His wife predeceased him 15 years ago. He leaves seven surviving sons and a daughter. Four of the sons, Messrs. John R. Pethick, Arthur H. Pethick, Benjamin H. Pethick, and Nicholas F. Pethick, are partners in the firm of Pethick Bros., which their father founded. The other sons are Dr. C. Stuart Pethick, of Woolton, near Liverpool; Mr. S. Robert Pethick, veterinary surgeon, Tiverton; and Mr. Ernest G. Pethick, who is also with the firm of Pethick Bros. Mr. Pethick's only surviving daughter, Edith, is the wife of Mr. Clarence Spooner, of Plymouth.—*The Western Morning News.*

## THE VETERINARY COLLEGES.

An important change in regard to the Scotch Veterinary Colleges is in course of taking form. Up to now there have been three Veterinary Colleges in Scotland, and only one in England, namely, the Royal Veterinary College, London. Although the teachers of the Veterinary Colleges carry out a great deal of research work which is of the greatest value to farmers and stock-owners, no public money is at present available for assisting or rewarding them in such work. Various schemes for affillating the Veterinary Colleges to Universities or Agricultural Colleges receiving grants of public money have been proposed, but have never passed beyond the preliminary discussion stage. A scheme of that sort, with a good deal of money involved, was proposed some time ago in connection with the Royal (Dick) Edinburgh; but the scheme appears to have dropped into a state of "suspended animation." For a long time back, Principal Williams, of the New Veterinary College, Edinburgh, has been moving in the way of getting the Veterinary Colleges affiliated with the Universities, and having a University degree for students who had previously taken their diplomas as members of the Royal College of Veterinary Surgeons. The University of Edinburgh professed plenty of sympathy, but gave no assistance to the carrying out of such a scheme, at least as regards the New Veterinary College. But the authorities of the Liverpool University have recognised the wisdom of the Principal's proposal, and they have cordially agreed to adopt the Principal's scheme. The Principal has, therefore, decided to remove the New Veterinary College from Leith Walk, Edinburgh, to Liverpool, the whole of the teaching staff and the whole of the students going to Liverpool with him. The scheme will no doubt, be productive of great good to the New Veterinary College, and to the younger members of the profession generally.—*N.B.A.*

### Suicide of a V.S. at Ealing.

An inquest was held on Thursday afternoon, March 24th, at the Ealing Municipal Buildings, by the West Middlesex Coroner (Dr. Gordon Hogg), upon the body of Herbert Lincoln Taylor, 55, a veterinary surgeon, of 38, Drayton Grove, West Ealing.

Ellen Taylor, the widow, said she went to work at about nine o'clock on Monday morning, leaving deceased in bed. He was then in his usual health. When she returned in the evening at about five, she found him dead. Deceased had never lately threatened to commit suicide; a long time ago he said he would take his life, but promised not to do so because of his children. He suffered a great deal with pains in his head, and at times could not sleep. He was warned about the paying of his rent, which was overdue, and a letter was produced from a firm of estate agents, saying that unless the money was paid, they would have to take the usual course. Witness felt sure that if the letter had not arrived her husband would not have killed himself. A glass was found by the side of deceased's bed, smelling of prussic acid, and a bottle containing some of this acid was discovered in his pocket. He always kept some prussic acid in the house to use in his business when need arose.

Elizabeth Hauer, a lodger in the house, said she took a message up to deceased during the day, and spoke to him through the door, and he answered her quite in his usual way.

Mrs. Johnson, a neighbour, gave evidence of having seen deceased on Saturday, when he appeared in fairly good spirits.

Richard Laws, of "Highfield," Acacia Road, Acton, said he knew Taylor in connection with his profession. Deceased came to his house on Saturday afternoon, and asked if he (witness) could give him a little monetary help. This he was obliged to refuse. He asked deceased why he did not call in some debts that were owing to him, but deceased answered that he was afraid of offending the people. Deceased thanked him, although he was not able to lend the money, and said "I will try what some prussic acid will do." He (witness) told him not to talk like that; he would be able to pull through.

Dr. G. Phillips, 88 The Avenue, said he had attended deceased, who suffered very much from bad headaches, which would be likely to affect his brain. He was called in on Monday, and found deceased lying dead. There was a glass, which smelt of prussic acid, by the bedside, and deceased himself also smelt of it. He always thought deceased was a man who would be likely to commit suicide, and had warned a friend about it.

The jury brought in a verdict of "Suicide whilst temporarily insane," and they handed their fees to the widow.—*Middlesex County Times.*

### The Tadcaster Docking Case.

At Tadcaster the case of "docking," which has excited so much interest, should have been heard, James Edward Scriven, veterinary surgeon, Tadcaster, and Henry Watson, farmer, Newton Kyme, being the defendants. Mr. Dashwood Carter, York, applied on behalf of the Royal Society for the Prevention of Cruelty to Animals to be allowed to withdraw the case, but Mr. Bromet, for the defendants, opposed the application, saying his clients had all the leading veterinary professors in the county on their side, and that they had been put to considerable trouble and expense. If withdrawn the Society must pay the costs.

The Bench adjourned the application for a fortnight to allow the Society to come to terms with the defendants.

### Diseased Meat sent to London.

George Osborn, a veterinary surgeon, of Fulstow, Lincolnshire, was summoned at the Guildhall, as the person to whom belonged the carcase of a sheep which on Feb. 25 was seized in the Central Meat Market as being unfit for human food. Alderman Sir Horatio Davies, M.P., held that the defendant ought to have known of the circumstances under which the meat was sent to London, and added: "Some people seem to think that any stuff is good enough for London, but it cannot be too widely known that meat has not only to pass the ordeal of the inspectors, but the salesmen take it upon themselves to protect the public, and do it very well indeed, I shall fine the defendant £25 and £5 costs.

## CORRESPONDENCE.

### "MATERNAL TOXÆMIA."

Sir,

Since writing you a fortnight ago on the above subject I have been cogitating within my own mind upon this matter, and have come to the conclusion that the above title for our old friend "Milk Fever" may be still further improved upon. The term "Mammary Toxæmia" which thus has suggested itself to me I now submit to you and your readers for approval, or it may be for rejection, but as it appears to me to still more accurately define this disease, I now submit it to the approval of the profession with some degree of confidence, and shall be pleased if I find that my confidence has not been misplaced. This title describes the particular maternal organ involved in the disease, and is therefore to my mind a distinct advance on the title of "Maturnal Toxæmia," which does not particularise beyond an indication of the subject, while the term mammary toxæmia not only indicates the subject but further indicates the particular organ involved, as none but maternal subjects possess active mammary organs. If we could go with confidence a step further still, and feel satisfied that the product of the mammary gland is the cause of this disease, then probably it would be more correct to name it "Lacteal Toxæmia," but in the present state of our knowledge I consider it wisest to adhere to the term "Mammary Toxæmia" as that term covers the whole field, even if it be ultimately proved that the milk, the product of the gland, as distinguished from the gland itself, or some other adventitious product thereof, is the cause of the toxic state.

The adoption of this title would probably prove less objectionable to one's lady friends too as your correspondent G. Mayall suggests. But the ladies need take no umbrage at the use of the word maternal in this connection, as the meanest of animals becomes equally entitled to its application on the production of her young, as the highest, most refined, most æsthetic, or most aristocratic lady in the land.

Human beings, in the eye of the naturalist, and according to the classification of natural history, are but animals, higher animals if you will, but still, but animals. Moreover the analogy may be carried still further without cause for well grounded complaint, as both human beings and quadrupeds, with which we are here more immediately concerned, belongs strictly to the same class of animal, viz., mammalia, or those which bring forth their young alive, and provide them with sustainance during the primary period of existence, by means of mammary or milk glands, the particular structure involved in this disease, and whose name I now suggest should be given as a distinguishing prefix to the word toxæmia, in order that we may the more fully and accurately describe the character of the disease in question.—I am, yours truly,

A.S.V.S.

### THE NOMENCLATURE OF SO-CALLED MILK FEVER.

Sir,

Mr. Mayall occupies nearly half a column of your valuable paper in asserting that "maternal toxæmia" is a suitable name for this disease. Now I must entirely disagree with him. Maternal toxæmia is a phrase with a specific meaning and it embraces conditions other than the one under consideration—any condition in which a toxin exists in the blood is a toxæmia—all cases of metro-peritonitis, or even of metritis in the mother may be said to be in a state of "toxæmia." Though they would not be so described, as the local manifestation furnishes a more useful name for the disease.

In my humble opinion that name furnished by the local clinical manifestation is far more useful and practical and that is, of course, parturient apoplexy.—Yours etc.,

F. O. P.

### THE LATE ALDERMAN PETHICK.

Sir,

Those among your readers who, as members of the National Veterinary Association attended the annual meeting held at Plymouth in July, 1898, will no doubt be grieved to hear of the death of Alderman John Pethick, J.P., caused by injuries received in a carriage accident on the 26th ult. I have forwarded to you an account of the accident together with an obituary notice obtained from the local press.

At the time of the visit of the National, Mr. Pethick held the office of Mayor, and you will remember the interest he took in the meeting and the hospitality and kindness he showed the members and their friends on that occasion.

As I had the pleasure to act as Local Secretary I am able to speak from my own knowledge, and although the Western Counties Veterinary Medical Association did their best to entertain and please their guests, still the valuable and hearty assistance rendered by the Mayor to make the meeting a success should not be forgotten. He was a great lover of horses and supported every movement for their benefit, and was also a good friend to the veterinary profession. He has passed away at the ripe old age of seventy-six, full of years and honours, and leaves a family of seven sons (one of whom, Mr. R. S. Pethick, of Tiverton, is M.R.C.V.S.) and a daughter to mourn his loss.

I believe I am expressing the feelings of the members of the National and Western Counties Veterinary Associations in deeply sympathising with them in their great and sad bereavement.—I remain, yours faithfully,

P. G. Bond.

Plymouth.

### Erratum.

Dear Sir,

In my letter on "Milk Fever" in last week's issue, the last line—"which no doubt are ærobic by depriving them of oxygen," should read "which no doubt are anærobic by destroying them with oxygen."

J. W.

Communications, Books and Papers received.—Messrs. John Aitken, A. Spreull, E. R. Harding, A. Marston, Ll. E. W. Bevan. "A Midland Vet." F.O.P.

*The Farmer & Stock Breeder, The Western Weekly News.*